

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-8. (Canceled).

9. (Currently amended): A device for acquiring latent image information contained in a phosphor layer, said device comprising:

a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer, said emission light having a first wavelength range and said excitation light having a second wavelength range;

a detector for detecting the emission light that has been excited in the phosphor layer; and

a filter device, arranged between the phosphor layer and the detector, the improvement wherein:

the filter device comprises at least two absorption filter elements which are joined to one another,

wherein the filter device is substantially transparent in a first wavelength range of the emission light and is substantially non-transparent in a second wavelength range of the excitation light, and

wherein the filter device is substantially non-transparent in at least a third wavelength range that is located at longer wavelengths than the second wavelength range of the excitation light, and

wherein the filter device and the detector comprise an integrated photodetector.

10. (Previously presented): The device according to claim 9, wherein the filter device comprises at least two filter elements,

wherein at least a first one of the filter elements is substantially transparent in the first wavelength range of the emission light and is substantially non-transparent in the second wavelength range of the excitation light, and

wherein at least a second one of the filter elements is substantially transparent in the first wavelength range of the emission light and is substantially non-transparent in the third wavelength range, which is located at longer wavelengths than the second wavelength range of the excitation light.

11. (Previously presented): The device according to claim 10, wherein at least one of the filter elements includes a second reflection layer that is substantially non-transparent for light in a fifth wavelength range, which is located at longer wavelengths than the second wavelength range and which partially overlaps with the third wavelength range.

12. (Previously presented): The device according to claim 11, wherein at least one of the filter elements includes a first reflection layer that is substantially non-transparent for light in a fourth wavelength range, which is located at longer wavelengths than the second wavelength range, and

wherein the fifth wavelength range partially overlaps with the fourth wavelength range.

13. (Previously presented): The device according to claim 9, wherein at least one of the filter elements includes a first reflection layer that is substantially non-transparent for light in a fourth wavelength range, which is located at longer wavelengths than the second wavelength range.

14. (Previously presented): The device according to claim 13, wherein the fourth wavelength range partially overlaps with the second wavelength range.

15. (Previously presented): The device according to claim 9, wherein the third wavelength range overlaps with the second wavelength range.

16. (Previously presented): The device according to claim 9, wherein the filter device at wavelengths in the first wavelength range exhibits a degree of transmission that is greater than 0.1.

17. (Previously presented): The device according to claim 9, wherein the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission that is less than 10^{-3} .

18. (Previously presented): The device according to claim 9, wherein the third wavelength range borders on the second wavelength range.

19. (Previously presented): The device according to claim 9, wherein the filter device at wavelengths in the first wavelength range exhibits a degree of transmission that is greater than 0.7.

20. (Previously presented): The device according to claim 9, wherein the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission that is less than 10^{-4} .

21. (New): The device according to claim 9 wherein the thicknesses of the two absorption filters are the same order of magnitude.

22. (New): A device for acquiring latent image information contained in a phosphor layer, said device comprising:

a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer, said emission light having a first wavelength range and said excitation light having a second wavelength range;

a detector for detecting the emission light that has been excited in the phosphor layer; and

a filter device, arranged between the phosphor layer and the detector, the improvement wherein:

the filter device comprises at least two absorption filter elements which are joined to one another,

wherein the filter device is substantially transparent in a first wavelength range of the emission light and is substantially non-transparent in a second wavelength range of the excitation light, and

wherein the filter device is substantially non-transparent in at least a third wavelength range that is located at longer wavelengths than the second wavelength range of the excitation light.

23. (New): The device according to claim 22 wherein the thicknesses of the two absorption filters are the same order of magnitude.